

Architecture

Issue 6:1991

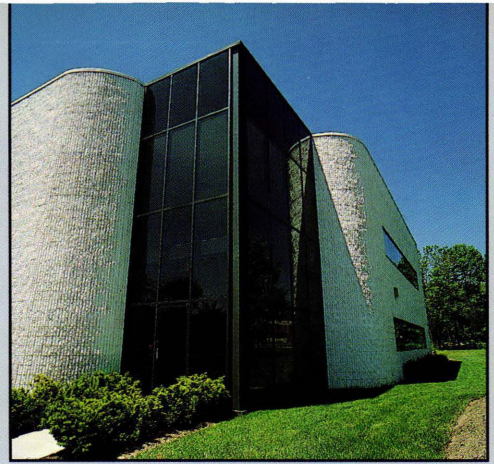
New Jersey

Township of Franklin Public Safety Building

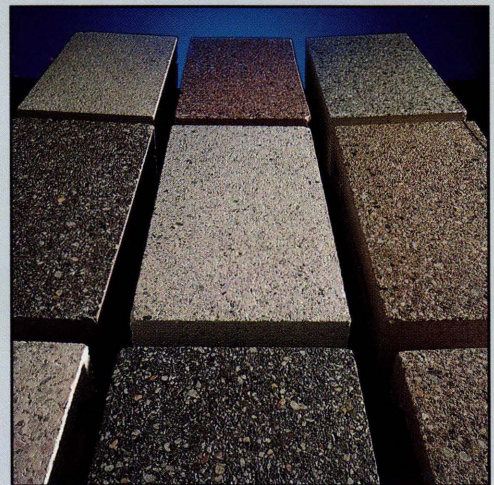
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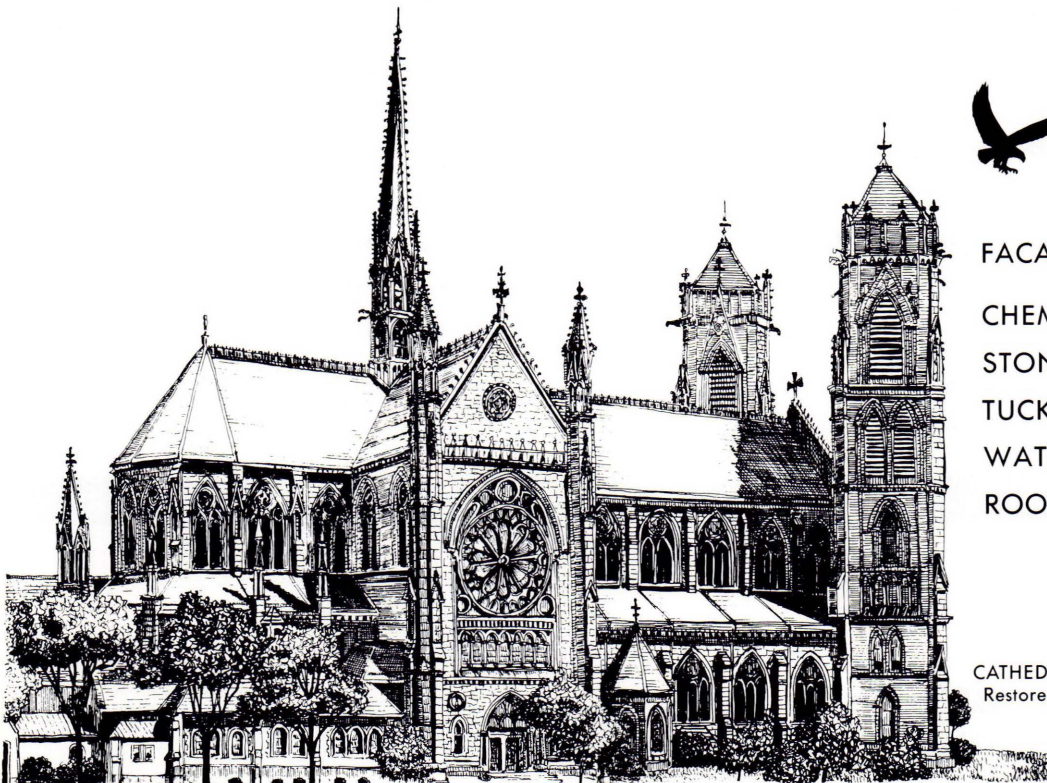
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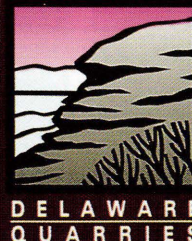
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Architecture

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New Jersey

Architecture For Justice

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Monmouth County Correctional Institution

Rothe-Johnson Associates

United States Courthouse Annex

Oliver & Becica

New Municipal/Public Safety Building

Morton Russo Maggio

Union County Correctional Facility

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Police Headquarters and Municipal
Complex

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Medium Security Facility

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Massachusetts Correction Institution for
Women

Grad Associates/HMFH Architects

Franklin Township Public Safety
Building

Kehrt Shatken Sharon

Prisons Through History,

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Cover: Franklin Township Public Safety Building
Kehrt Shatken Sharon: Architects

Cover Photo: Otto Baitz

Architecture New Jersey (USPS 305-670) is a publication of the New Jersey Society of Architects, a Region of the American Institute of Architects. It covers projects of current interest, news of architects, and issues in architecture. The purpose of the publication is to increase public awareness of the built environment. The publication is distributed to all members of the New Jersey Society of Architects, to consulting engineers, to people in fields related to architecture, and to those leaders in business, commerce, industry, banking, education, religion, and government who are concerned with architecture. Views and opinions expressed in Architecture New Jersey are those of the writers and not necessarily those of the New Jersey Society of Architects.

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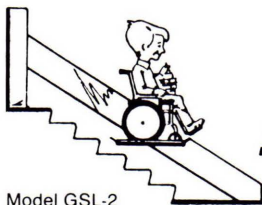
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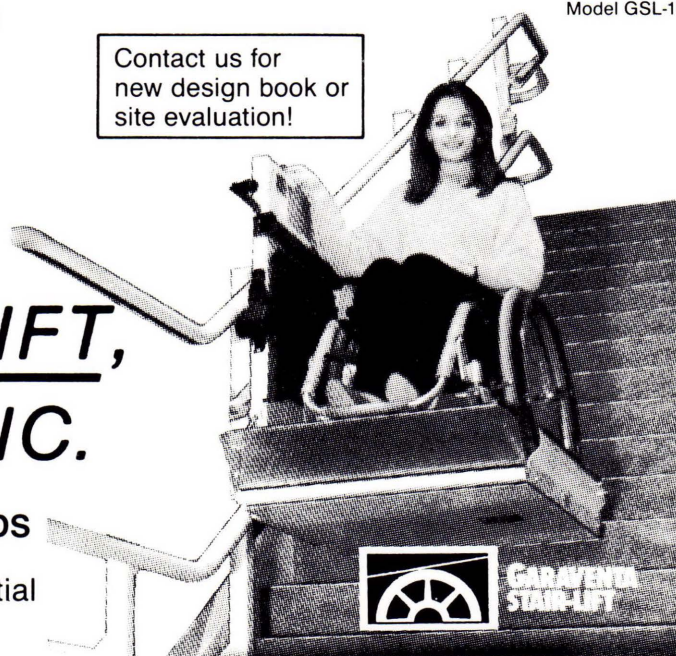


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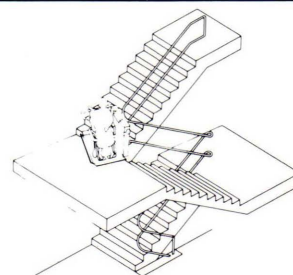
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New Jersey
Vol. 27, No. 6 1991

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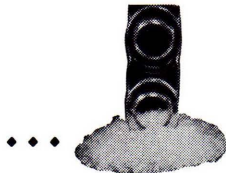
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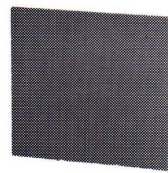
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Introduction

One of the few building types that continues to be in demand during an otherwise recessionary cycle is correctional facilities. While this issue is devoted to the broader category of Architecture for Justice, it amply illustrates the fact that construction of prisons and jails is a high priority in the United States at the present time. Responding to demands for more arrests, more convictions, and longer sentences, government officials have dramatically increased the US prison and jail population to an all-time high of over 1.2 million people. The result has been to overwhelm the existing stock of aged facilities, many of which have been found to violate inmates' right to be protected from cruel and unusual punishment, and create a need for new buildings.

There are a variety of philosophies about incarceration competing for acceptance. In general they can be simplified into two categories: punishment and rehabilitation. The former holds that violators of societal norms must pay in the form of discomfort and deprivation, and the latter, that to avoid further disruptions to society, offenders should be "treated" in an effort to avoid future violations.

Most facilities planned and constructed recently are based on some combination of the two. Many correction professionals feel that facilities are actually less important than programs, and would prefer to see money spent on drug rehabilitation, education, vocational training, counseling, and other services rather than on steel and concrete.

For architects, these questions can produce some ambivalence. The larger question as to whether or not the facilities are used to enhance "Justice" is generally left to society as a whole. Meanwhile, the present boom in prison and jail construction (one for convicted felony offenders and the other for less serious offenders and those, presumably innocent, awaiting trial) has yet to catch up with the demand in many places.

The requirement for space to house the police, prosecutors, and judiciary necessary to supply the inmates is also being addressed but to a lesser extent. Generally, this is happier work: The occupants are engaged in important public business, and the buildings offer a clear opportunity for significant design. We regret that in our society, the examples are so heavily outnumbered.

—J. D.

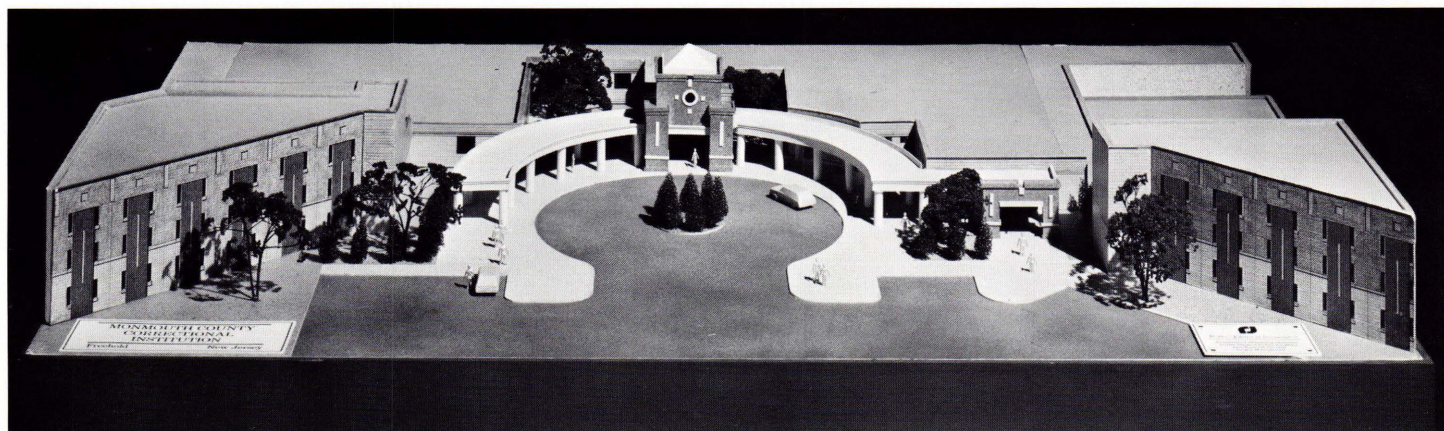
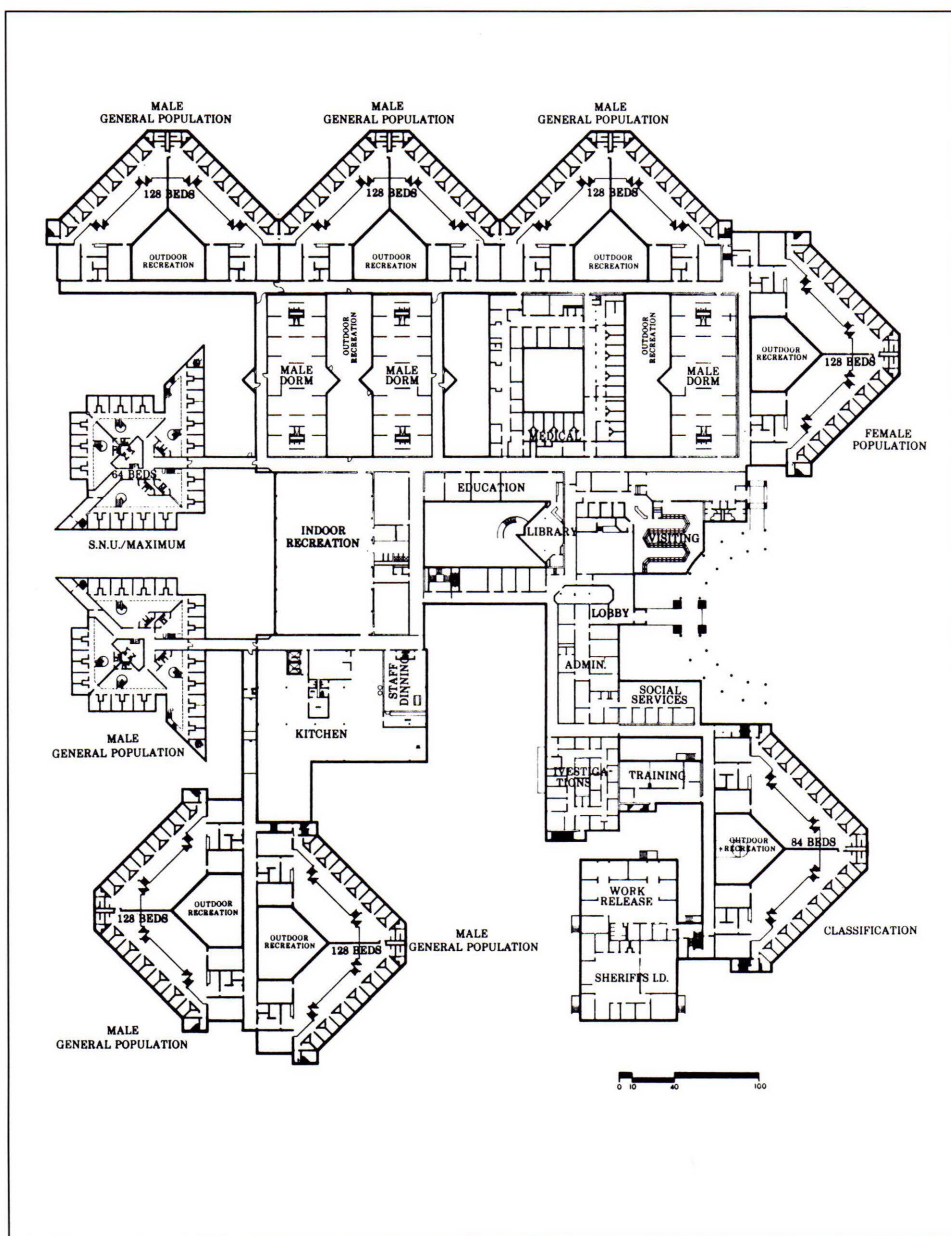
Monmouth County Correctional Institution, Freehold Township, New Jersey

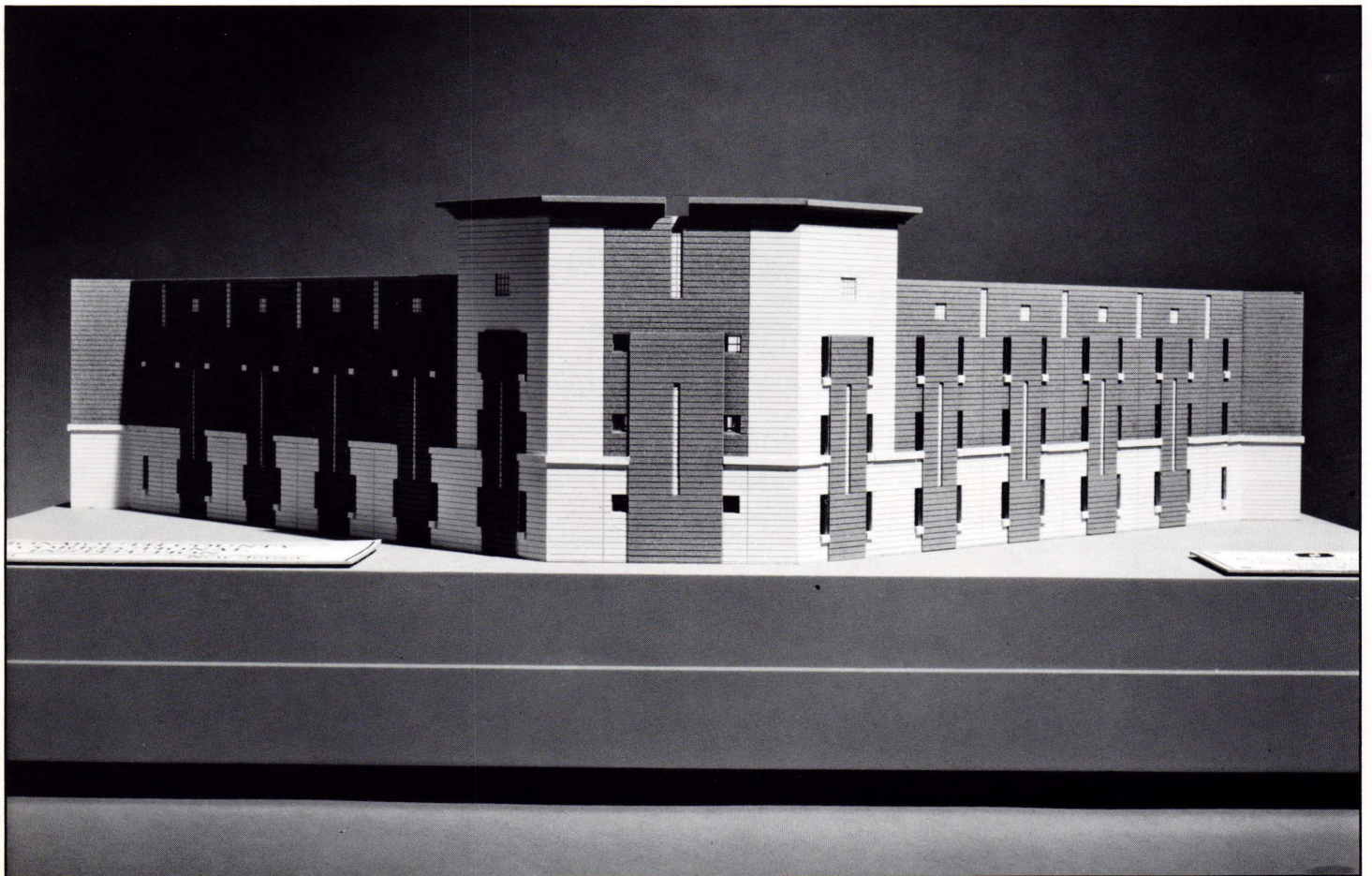
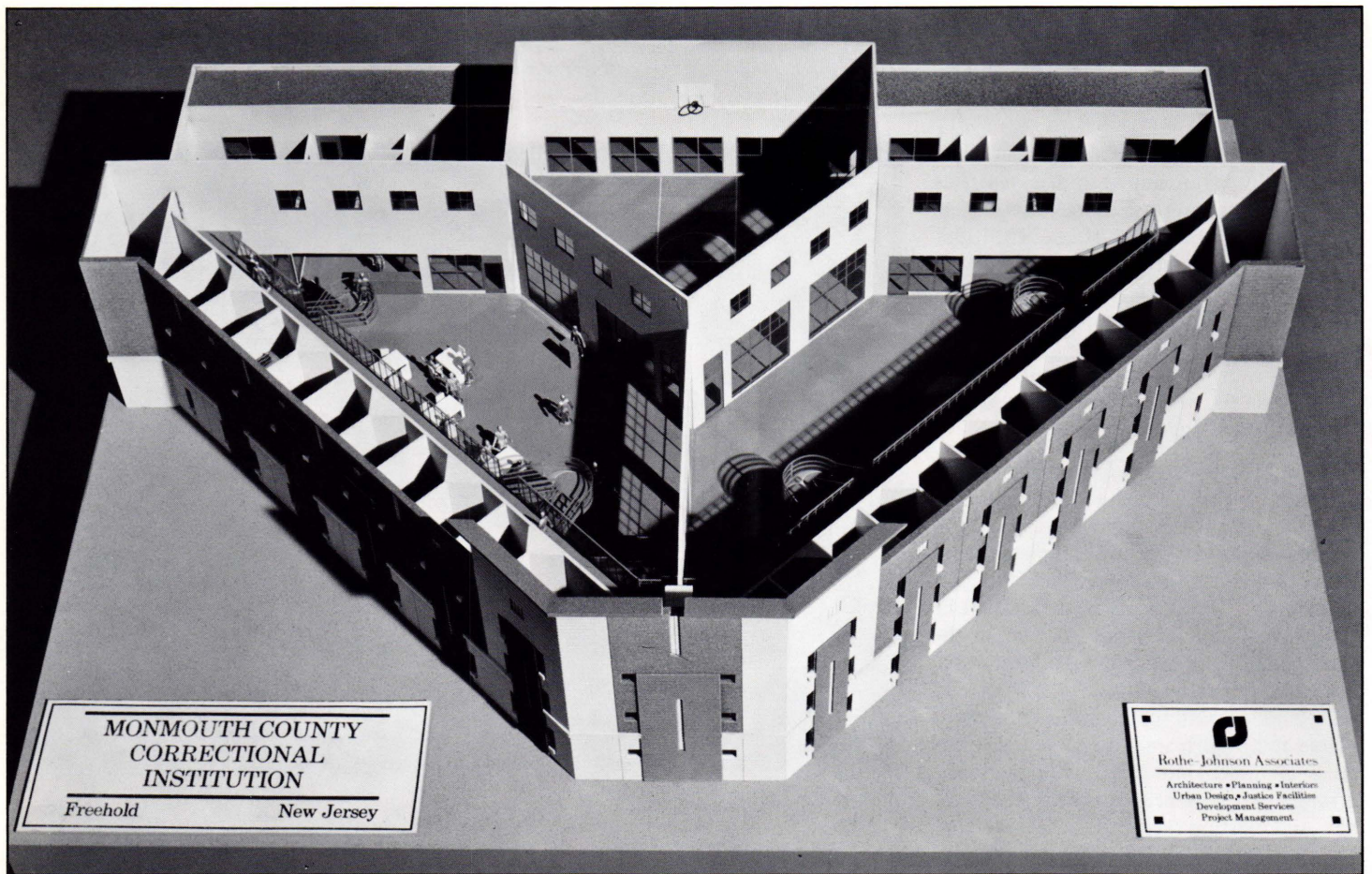
Rothe-Johnson Associates, Edison, New Jersey

This project for the Monmouth County Sheriff's Department Corrections Division incorporates two parts: a master plan and the initial construction phases.

The master plan calls for the replacement of existing beds to conform to present standards, and the addition of new beds, for a total of 1200 beds. The plan also calls for extensive program and service support space.

In phases I and II of the expansion program, a large portion of the master plan will be executed. □





United States Courthouse Annex, Camden, New Jersey

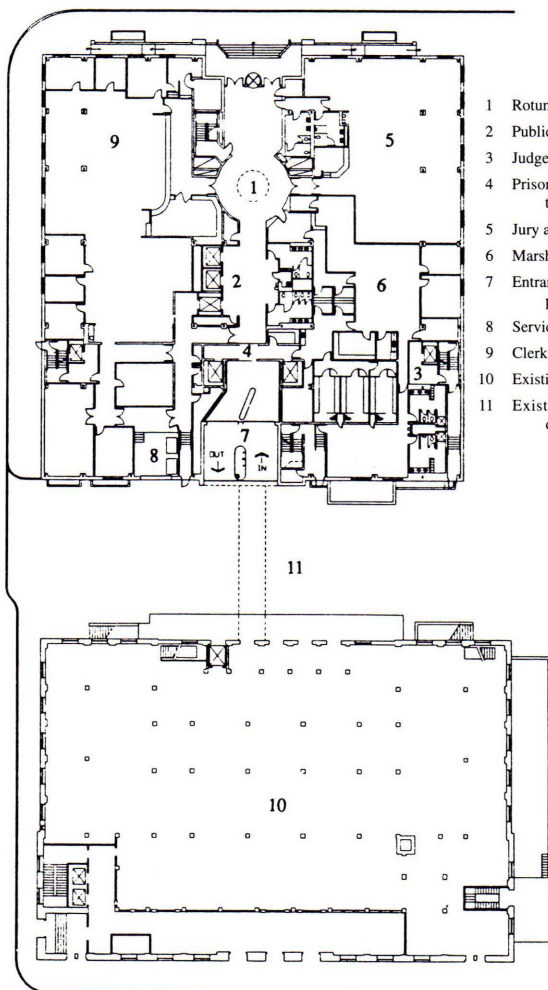
Oliver & Becica, Architects/Engineers, Cherry Hill, New Jersey

This new courthouse shares a site with the existing courthouse and post office buildings, creating a Federal complex in Camden. The design of the 150,000-square-foot building is based on the Federal Revival style, with a two-story base above which the upper four stories are set back. The building is clad in limestone-like precast concrete and granite accent panels, with bronze-painted aluminum frame windows.

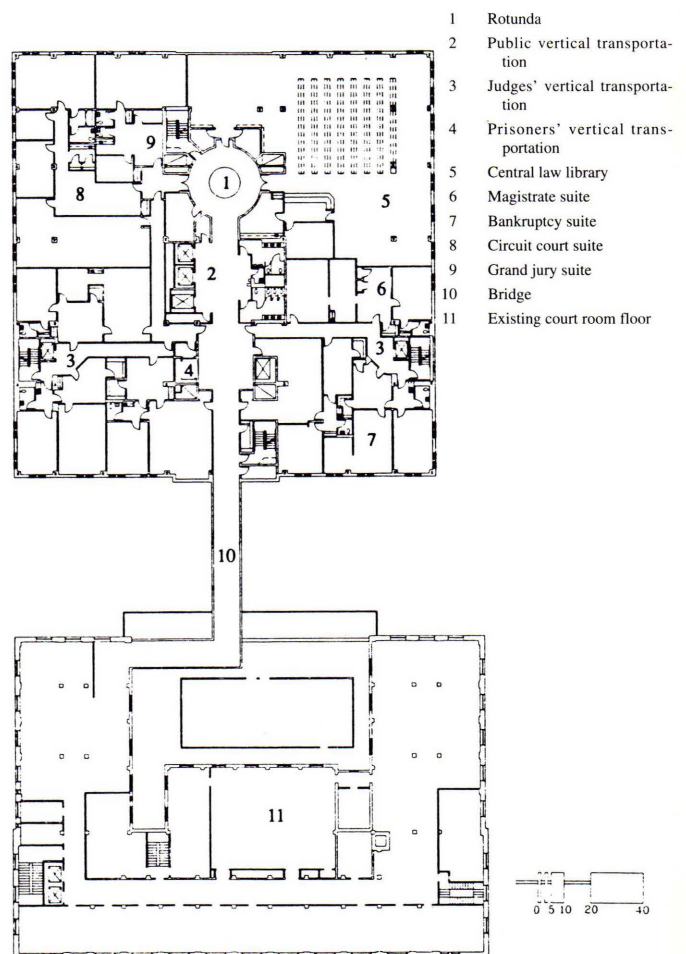
The interior spaces are symmetrically arranged, and will be finished in two phases. Initially, eight courtrooms and attendant facilities will be completed, with temporary office space provided for federal agencies. The temporary space will be rebuilt as four more courtrooms in the final phase. In a departure from the usual courthouse layout, judges' chambers will be separated from the courtrooms (though connected by private elevators) and located on an upper floor with a collegiate-type arrangement. A bridge will connect the new and existing facilities.



Photo: Tom Bernard.



First Floor Plan



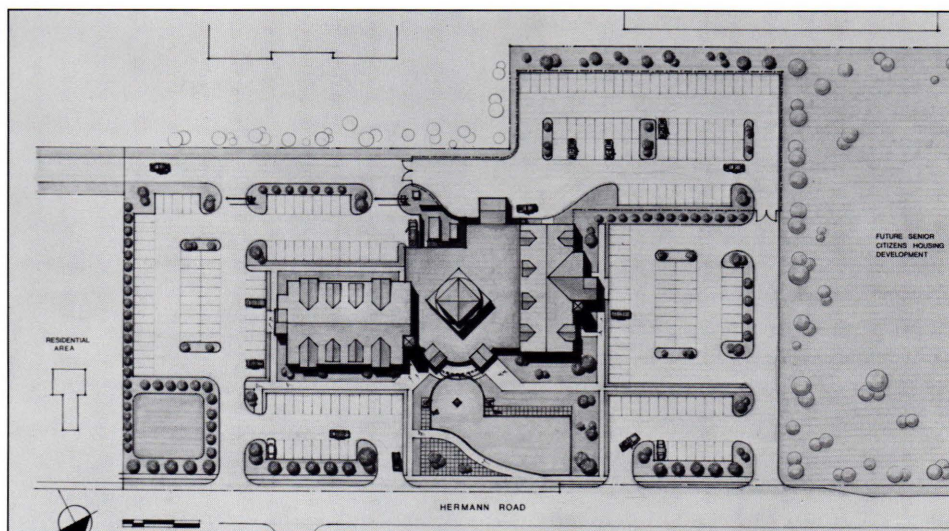
Second Floor Plan

New Municipal/Public Safety Building, North Brunswick Township, New Jersey

Morton Russo Maggio, Architects & Planners, North Brunswick, New Jersey

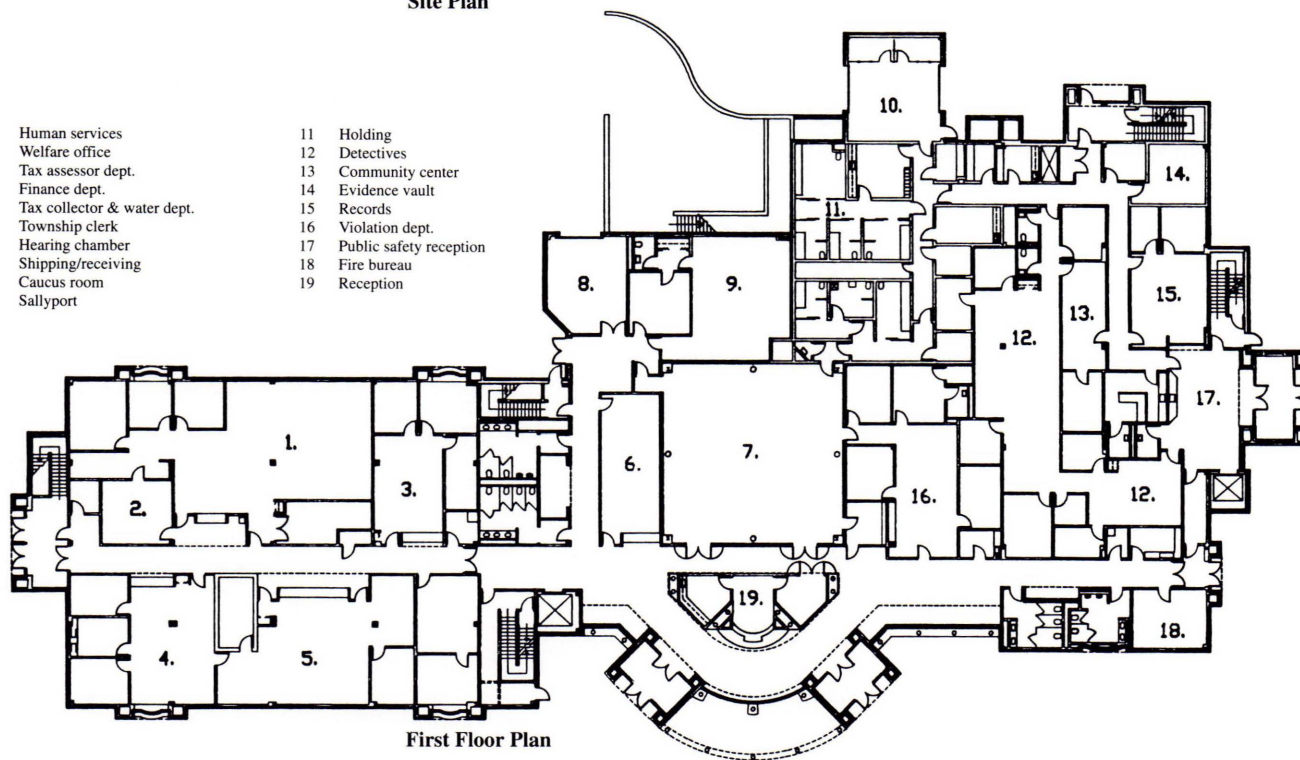
The North Brunswick Municipal Complex, an 80,000-square-foot facility, is being constructed on an 8.9-acre site across from the existing municipal building. The Complex incorporates a Police Department, Administrative Offices, and Courtroom, and provides space for further Township growth on the third level.

The architect's stated design philosophy for the Complex aims to combine contextual residential elements with classical elements familiar in judicial architecture. The courtroom is located symbolically at the center of the plan. Cladding material is brick.



Site Plan

- | | |
|-------------------------------|----------------------------|
| 1 Human services | 11 Holding |
| 2 Welfare office | 12 Detectives |
| 3 Tax assessor dept. | 13 Community center |
| 4 Finance dept. | 14 Evidence vault |
| 5 Tax collector & water dept. | 15 Records |
| 6 Township clerk | 16 Violation dept. |
| 7 Hearing chamber | 17 Public safety reception |
| 8 Shipping/receiving | 18 Fire bureau |
| 9 Caucus room | 19 Reception |
| 10 Sallyport | |



First Floor Plan



Union County Correctional Facility, Elizabeth, New Jersey

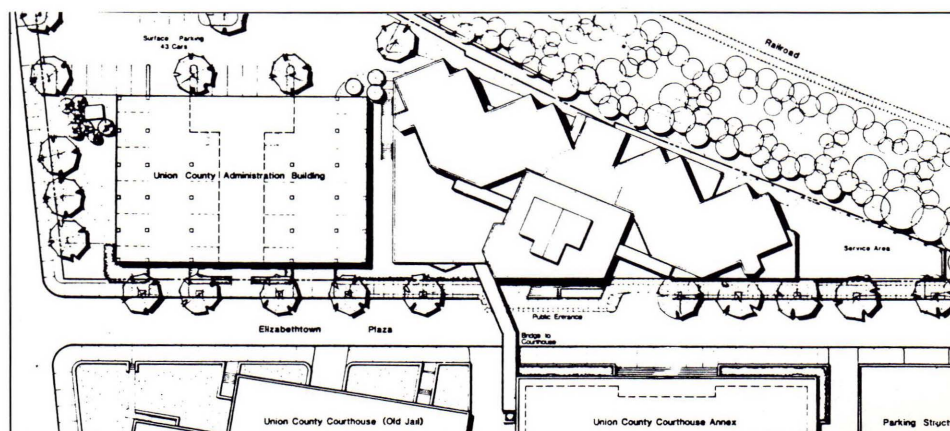
CUH2A, Architects, Engineers, Planners, Princeton, New Jersey

This 13-story, 520-bed county jail is built on a tight urban site, 1.75 acres in size, near the existing jail and the courthouse annex, and bordering the Amtrak railway right-of-way. Expansion capabilities have also been planned.

The facility accommodates several types of prisoners — those awaiting trial, those sentenced to short terms, and those sentenced to the state prison — with the appropriate state-mandated separation between their areas. Inmates are managed by the direct supervision system, and are housed in groups of 48 cells.

Most of the program rooms (for exercising, teaching, and visiting) are located on each floor, rather than centrally, to minimize inmate movement. Areas requiring access from the exterior — vehicular sallyport and booking area, public lobby, loading dock — are located near the ground floor.

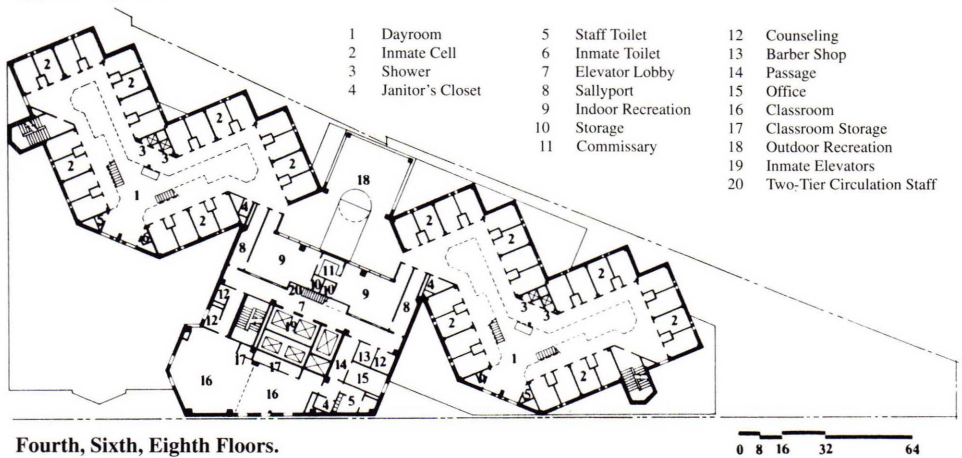
The building uses concrete masonry block, factory treated to resist moisture penetration. □



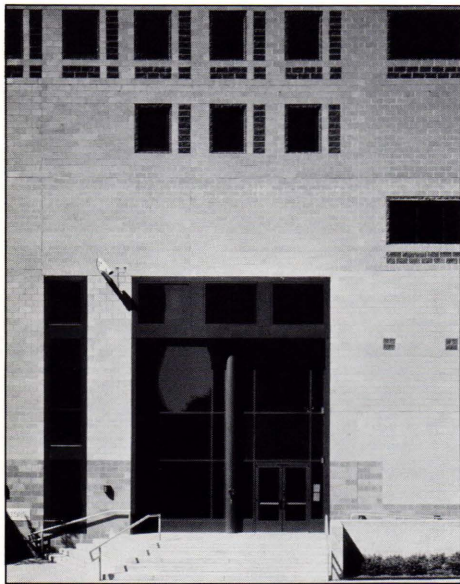
Site Plan.



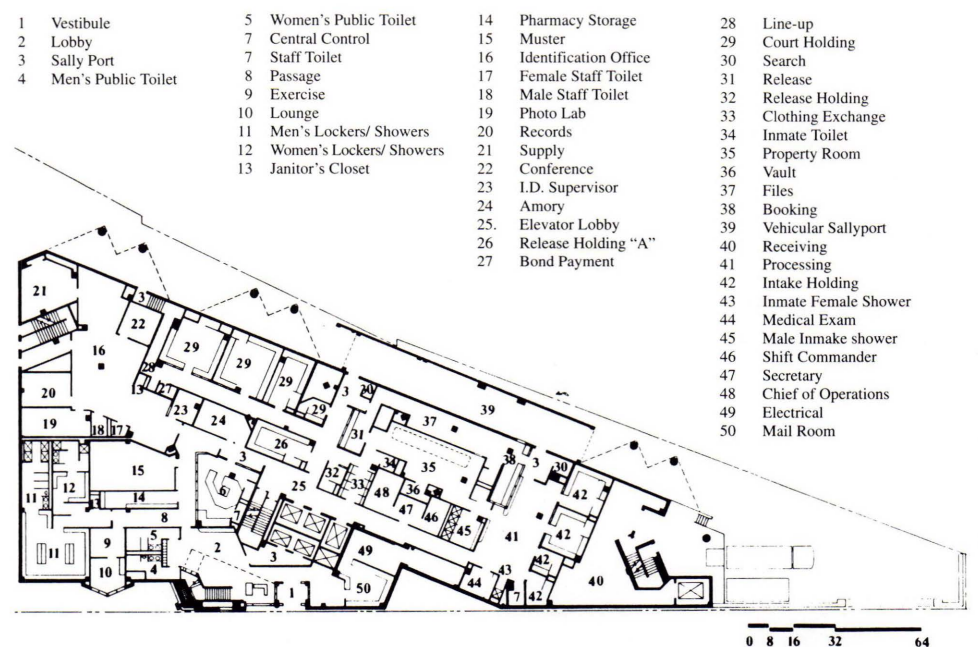
Typical Dayroom.



Fourth, Sixth, Eighth Floors.



Central Control.



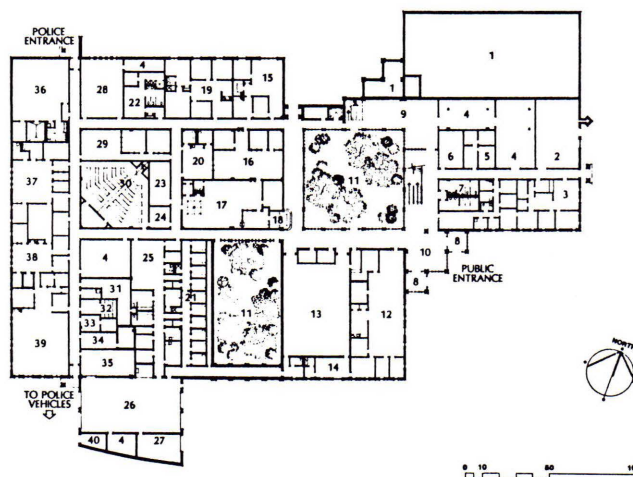
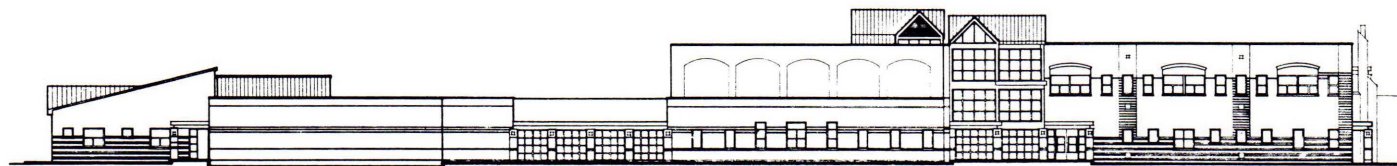
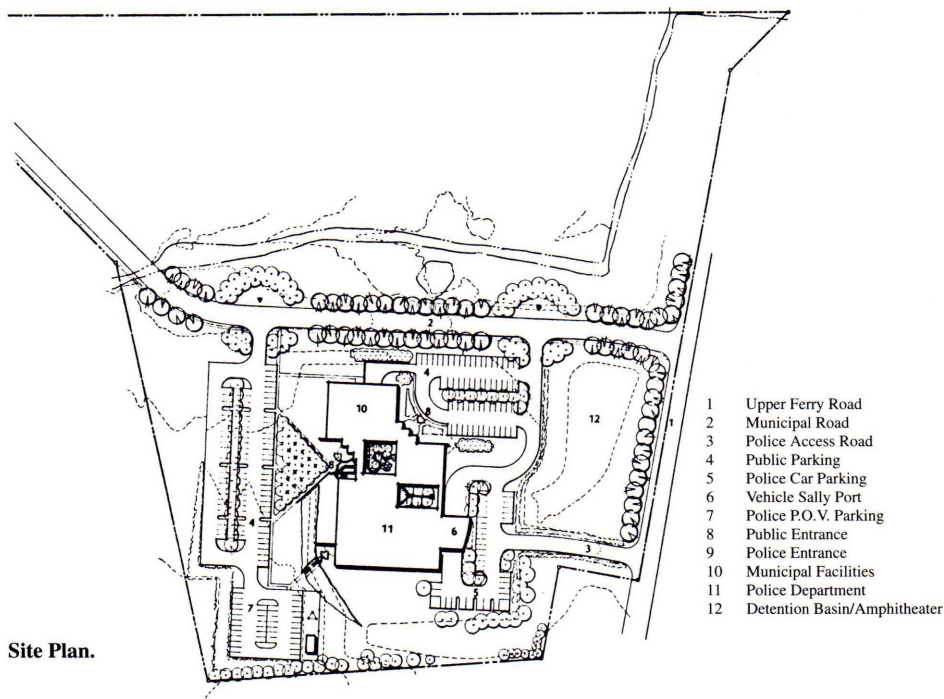
First Floor.

Police Headquarters and Municipal Complex, Ewing Township, New Jersey

Faridy Thorne Fraytak, P.C., Trenton, New Jersey

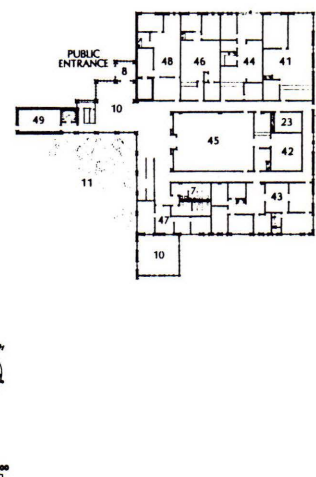
A sloped 15-acre site is used to advantage in this 61,000-square-foot facility. Township administration and Public Service Departments are located in the two-story portion of the building, while the Court, Violations Bureau, and Police Department are on the lower level. The Police Department is thus able to function independently from the other municipal offices, and is given its own private access road. This Department's main working areas are the vehicular sallyport, booking area, and holding cells. The Police Department connects directly to the Court.

The building's steel structure is wrapped in brick, aluminum, and glass. □



First Floor Plan.

- | | |
|-----------------------|--------------------------|
| 1 Unexcavated | 13 Courtroom |
| 2 Boiler | 14 Judge |
| 3 Health Suite | 15 Traffic |
| 4 Storage | 16 Central Records |
| 5 Welfare | 17 Communications |
| 6 Press | 18 Duty Lieutenant |
| 7 Toilet Rooms | 19 Police Administration |
| 8 Vestibule | 20 Police Lounge |
| 9 Employee Lounge | 21 Holding Cells |
| 10 Lobby | 22 Women's Lockers |
| 11 Exterior Courtyard | 23 Computer |
| 12 Violations | 24 Library |
| | 25 Booking/Reports |



Second Floor Plan.

- | | |
|--------------------------|---------------------------|
| 26 Sally Port | 38 Narcotics Staff |
| 27 Vehicle Evidence | 39 Detective Bureau |
| 28 Exercise | 40 Vehicle Maintenance |
| 29 Emergency Management | 41 Construction Office |
| 30 Briefing/Training | 42 Conference |
| 31 Record Storage | 43 Central Administration |
| 32 Tactical Response | 44 Tax Assessor |
| 33 Armorer | 45 Committee Room |
| 34 Crime Lab | 46 Township Clerk |
| 35 Bulk Evidence Storage | 47 Finance |
| 36 Men's Lockers | 48 Township Tax Office |
| 37 Juvenile Bureau | 49 Mechanical Room |

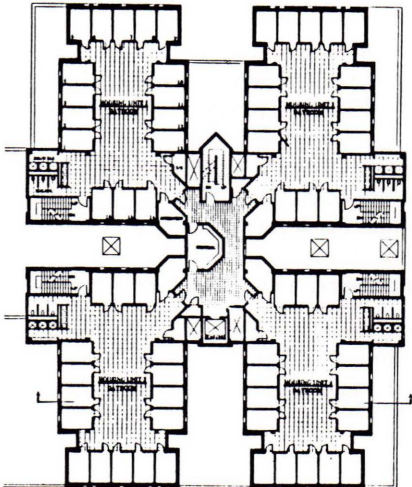
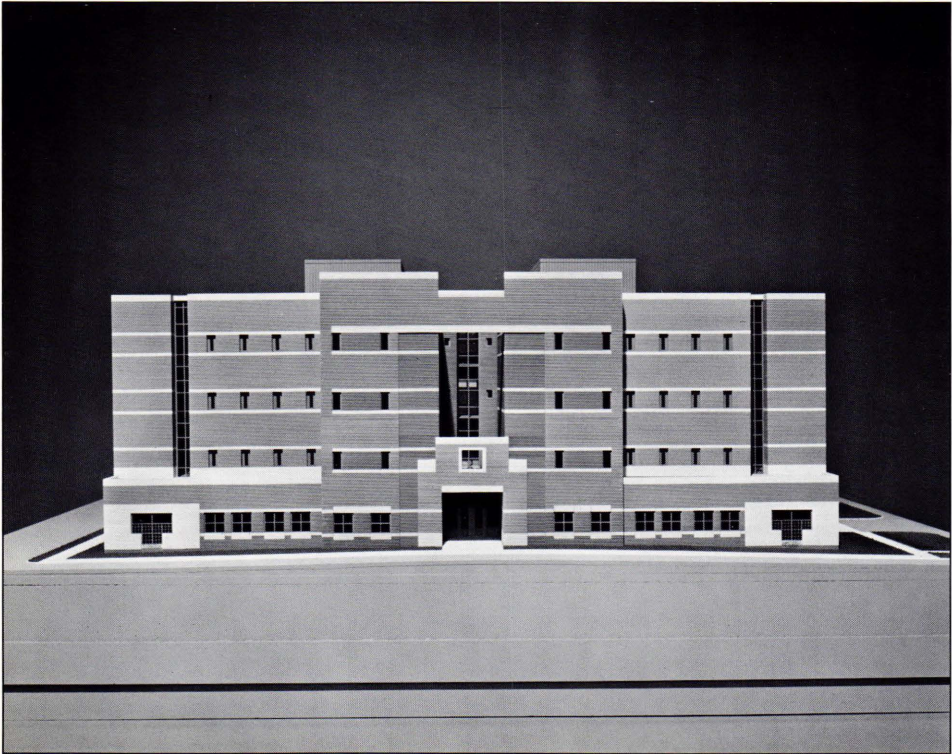
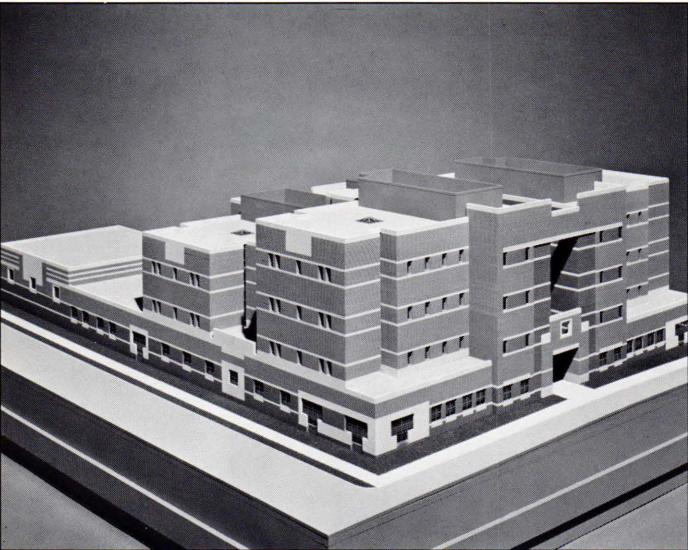
Essex Youth House, Newark, New Jersey
Rothe-Johnson Associates, Edison, New Jersey

This 85,000-square-foot youth detention center for Essex County will replace the existing outmoded youth house in Newark. The building facilitates the client's aims to provide strong educational and recreational programs, and to enable close visual monitoring of the youths in each of the program components. The upper floors of the building house the living units and infirmary, and the lower floors house educational and recreational programs, offices, and court.

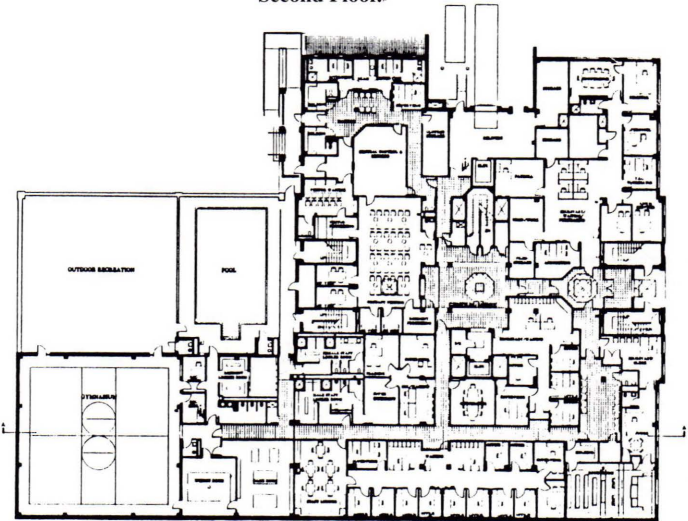
The living units, four in all, each con-

sist of 16 sleeping rooms around a day-lighted central room. This arrangement permits officers to monitor all rooms, to anticipate and avert problems.

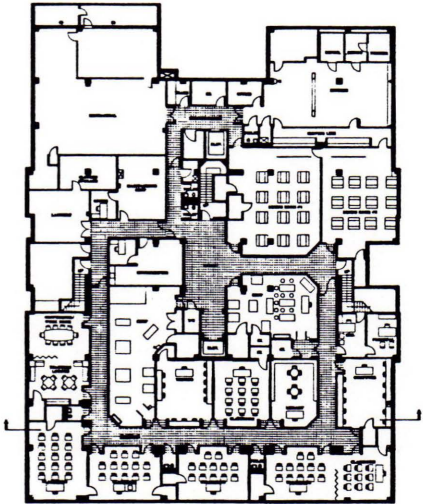
Orange-red brick clads the upper floors, with white ground-faced masonry accent banding. The base is sheathed in purple-brown decorative masonry, also with white accent banding. The upper floors are set back from the base, and service cores, containing stairs and toilets, are expressed as towers to articulate the design.



Second Floor.



First Floor.



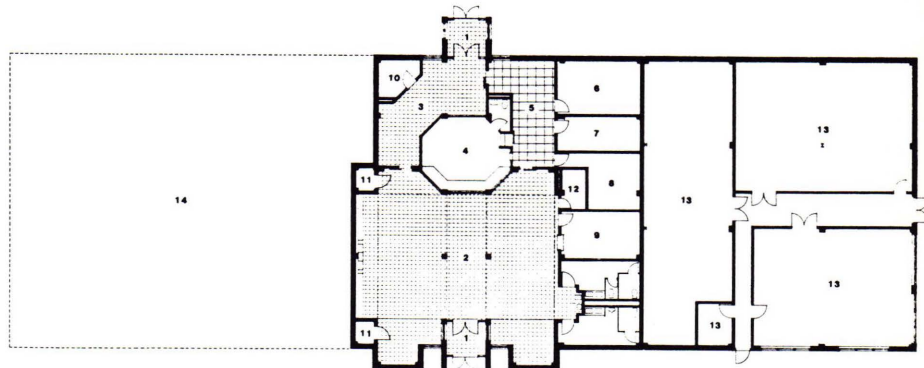
Basement.

Medium Security Facility, New Braintree, Massachusetts

Grad Associates, in association with HMFH Architects, Newark, New Jersey

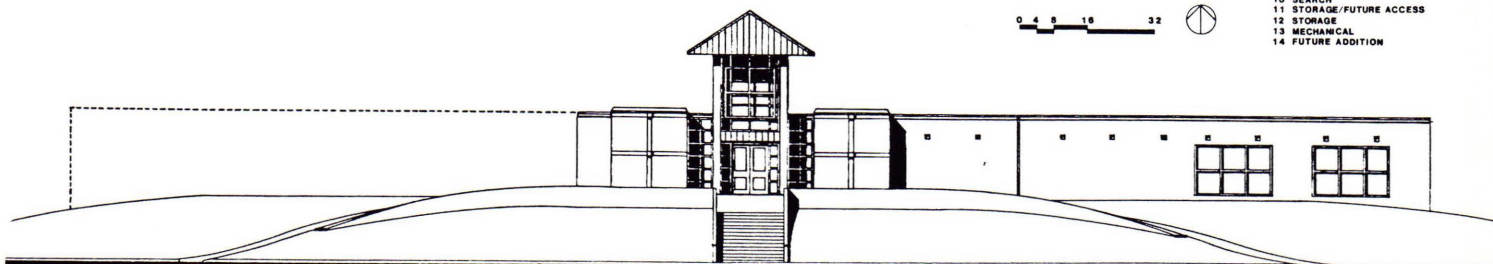
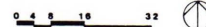
This project is the first phase of a 500-bed Medium Security Facility to be located on the 778-acre site of a former private school. Existing buildings will be renovated to provide space for housing and support activities. New construction is planned for the entrance gateway, public access facilities, contact visiting, segregation housing, and maintenance areas.

In the first phase, about half the programmed housing, as well as required support facilities, will be completed. □

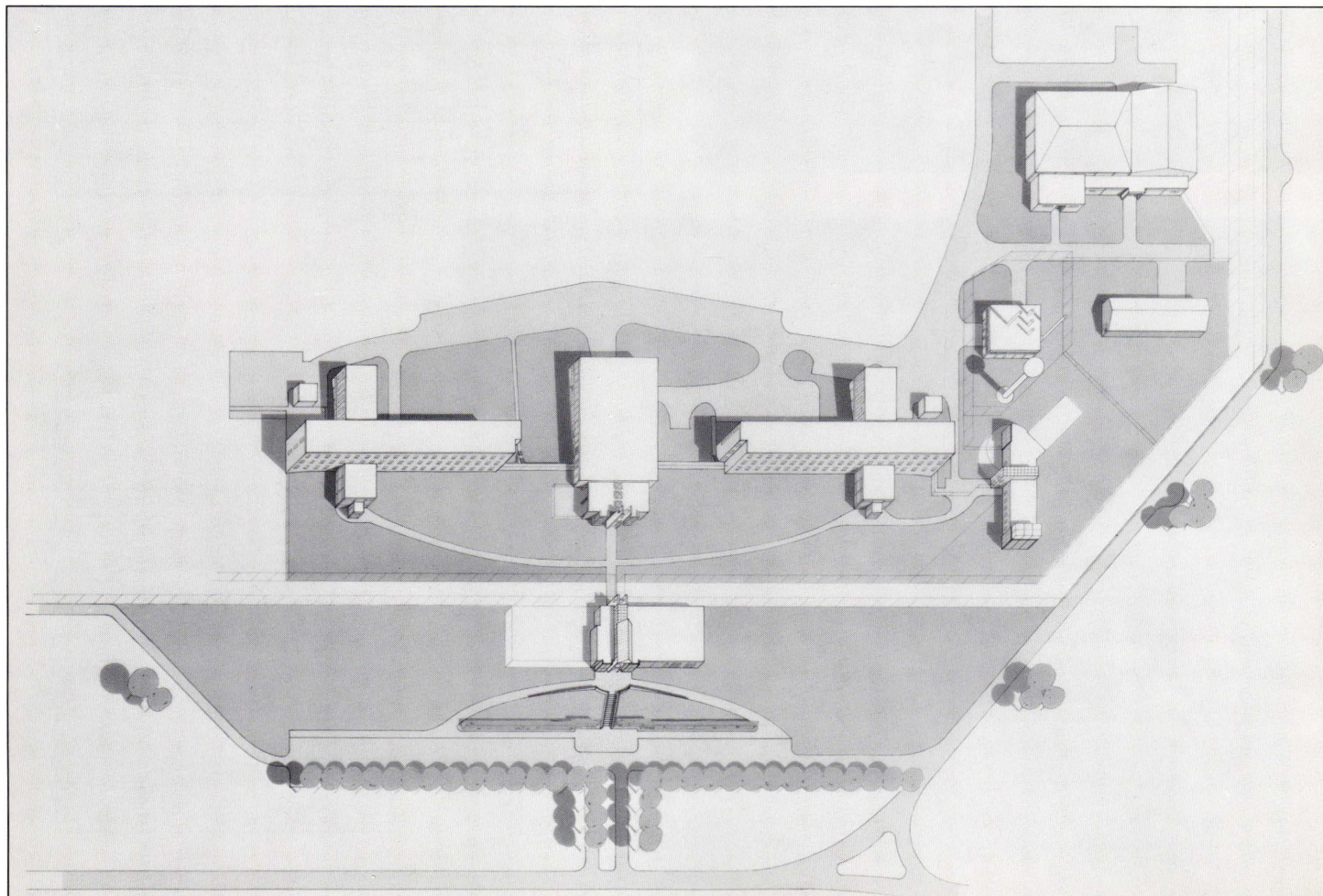


Floor Plan.

- LEGEND**
- 1 VESTIBULE
 - 2 MAIN LOBBY
 - 3 SALLY PORT
 - 4 CENTRAL CONTROL
 - 5 SECURITY SALLY PORT
 - 6 ARMORY
 - 7 CRT EQUIPMENT ROOM
 - 8 COMMUNICATIONS EQUIPMENT ROOM
 - 9 MAIL ROOM/SWITCHBOARD
 - 10 SEARCH
 - 11 STORAGE/FUTURE ACCESS
 - 12 STORAGE
 - 13 MECHANICAL
 - 14 FUTURE ADDITION



Public Access Elevation.



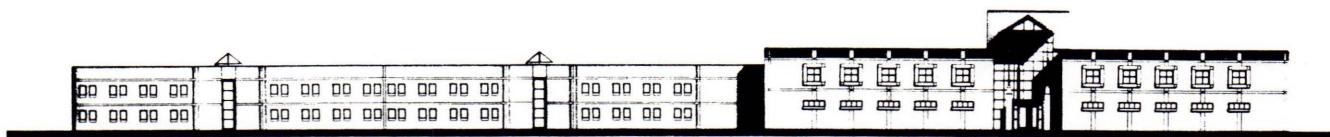
Massachusetts Correction Institution for Women, Framingham, Massachusetts

Grad Associates, in association with HMFH Architects, Newark, New Jersey

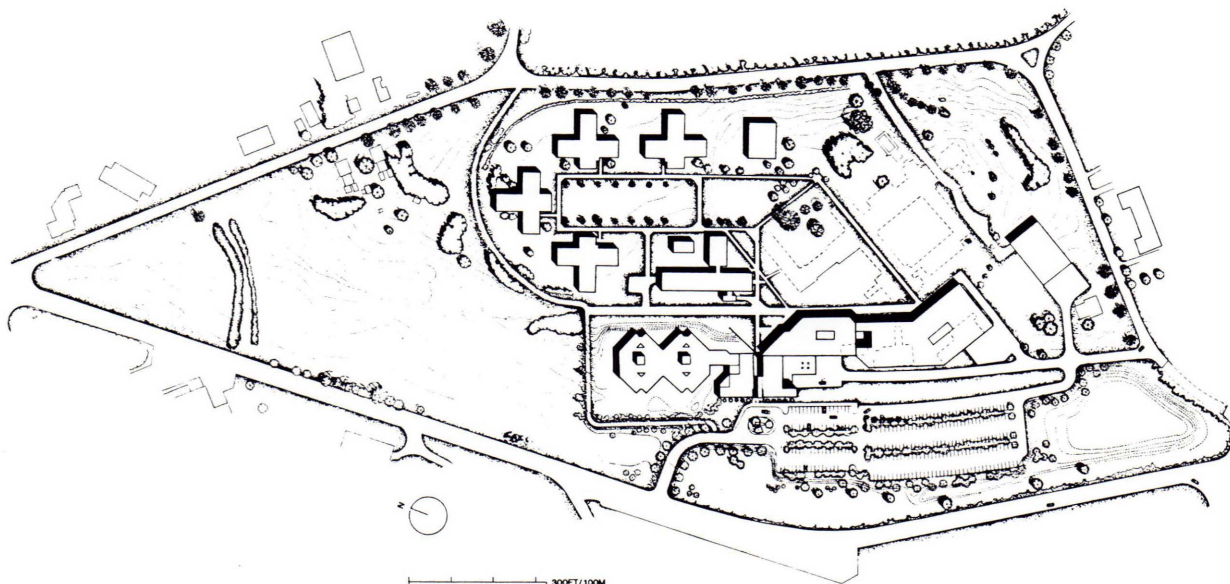
This low-rise structure serves as the central women's prison for the Commonwealth of Massachusetts. The 64,500-square-foot facility is comprised of 126 new beds and support facilities serving the new as well as the existing

400 bed institution. Located on an existing compound and highly visible from the street, the most public portion of the new structure's facade will be unfenced and will give the appearance of an office building.

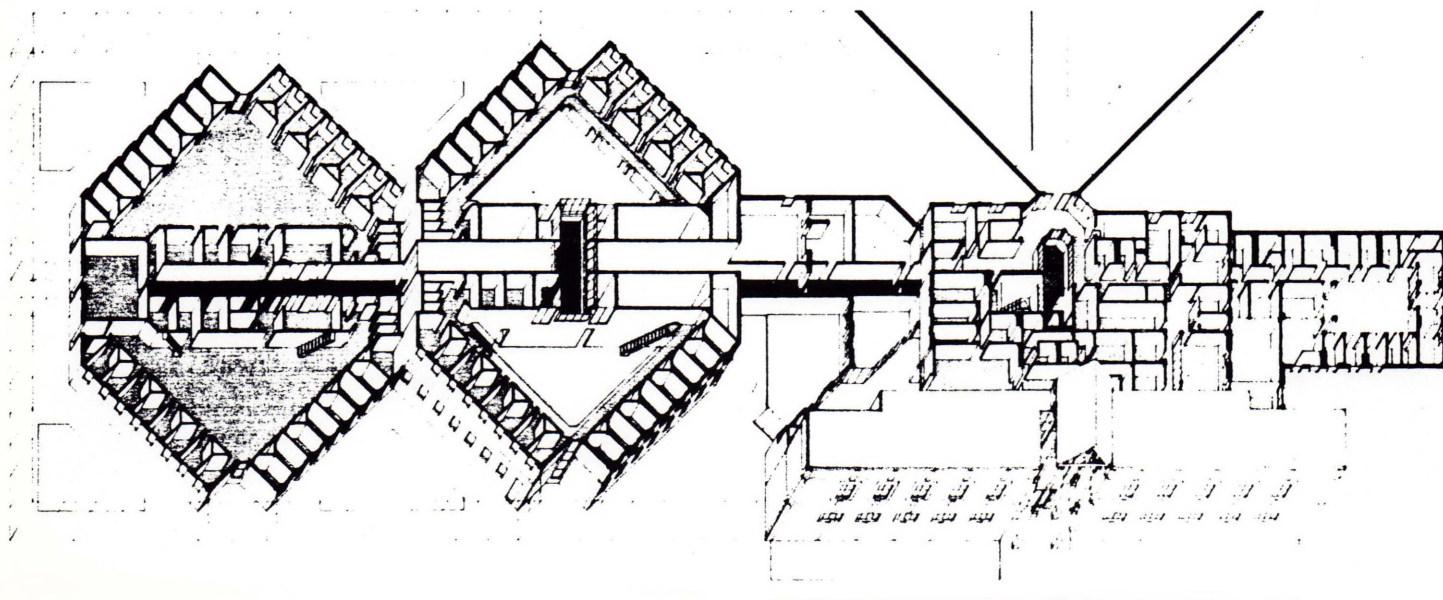
The project consists of maximum security "Special Offenders" and "Awaiting Trial" housing units. Each housing unit is managed by direct supervision with elevated, fully secured control rooms providing back-up. □



Elevation.



Site Plan.



Axonometric.

Franklin Township Public Safety Building, Somerset, New Jersey

Kehrt Shatken Sharon: Architects, Princeton, New Jersey

This 29,000-square-foot facility houses the Police Department, a ten-cell detention area, and the Municipal Court for Franklin Township. It was located in such a way as to create a new public space, around which it and three buildings existing on the site are organized.

In order to create an open, inviting atmosphere and yet provide strict separation between types of users (witnesses, prisoners, police), the rooms are arranged around a central skylit atrium.

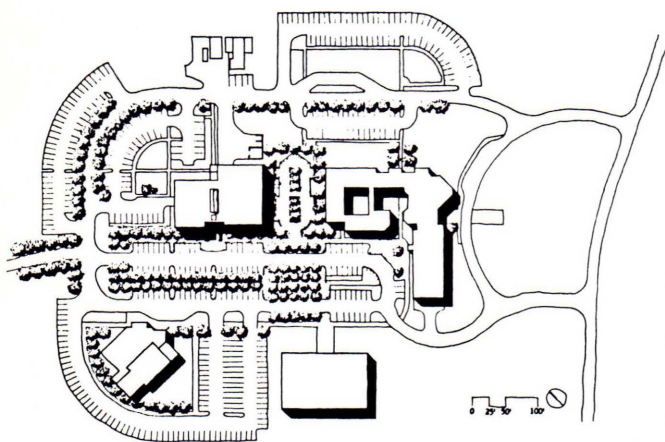
Materials include split face and ground face block, glazed block, and precast concrete and translucent plastic panels. □



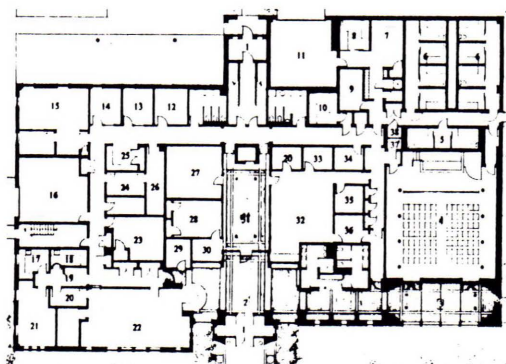
Atrium.



Courtroom.



Site Plan.



First Floor Plan.

- 1 Vestibule
- 2 Lobby
- 3 Courtroom Lobby
- 4 Courtroom
- 5 Female Cell
- 6 Male Cell
- 7 Processing
- 8 Holding
- 9 Drunk Driving
- 10 Juvenile Holding
- 11 Sally Port
- 12 Meters
- 13 Lounge
- 14 Division Commander
- 15 Traffic Bureau
- 16 Carport
- 17 Laboratory
- 18 Darkroom
- 19 Fingerprint
- 20 Copy
- 21 Identification
- 22 Records
- 23 Evidence
- 24 Switch Gear
- 25 Reports
- 26 Radio
- 27 Communications
- 28 Shift Commander
- 29 Public Defense
- 30 Desk Officer
- 31 Atrium
- 32 Violations Bureau
- 33 Clerk
- 34 Interview
- 35 Judge
- 36 Prosecutor
- 37 Visitor
- 38 Prisoner

Prisons through History

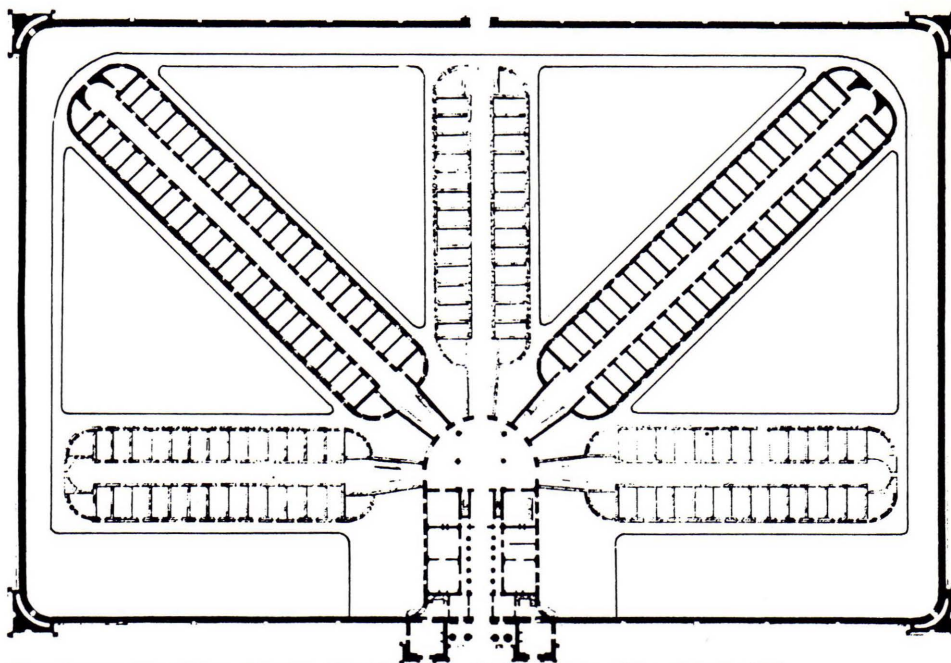
by B. Allen Trousdale, AIA, and Kenneth A. Underwood, AIA

Over much of human history, incarceration was not a major architectural issue. Those who broke laws or were captured in wars were enslaved or killed. Not until the Medieval era did two events occur that influenced the concept and form of prisons. The need for incarceration arose: Selling back a captured enemy became customary, so spaces within castle foundations came to serve as dungeons. And the form of the self-sufficient, isolated community evolved: The Catholic monastery came into being. The former development reflected the earliest philosophy of penology—offer misery in isolation—while the latter, centuries later, became a model for more enlightened approaches—foster penitence and rehabilitation. Since both monastery and prison constituted self-contained communities with cells, dining rooms, chapels, and workrooms, not only the concept but also the form of the religious complex influenced that of the penal one. Even today, the monastery model (seen in the medieval examples as well as in this century's La Tourette by le Corbusier) can help inform prison designers.

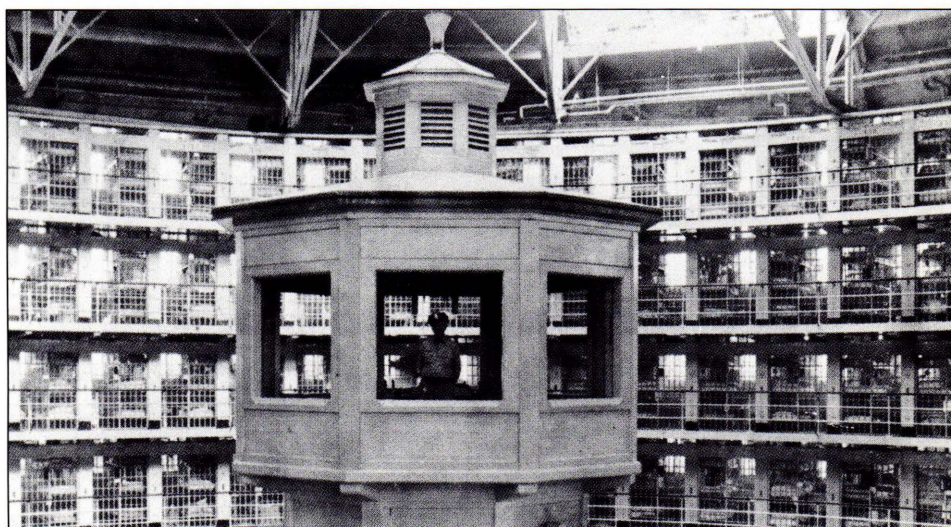
Supervision is, of course, of paramount importance in prisons. The radial prison plan was first conceived in this country in the 18th century, growing out of the Quaker belief that isolation in single cells would foster penitence. Long rows of single cells were arranged as spokes radiating from a hub, from which point a guard could visually supervise the corridor of every block of cells. This compelling architectural form, which arose directly from its function, can be seen, for example, in the Eastern State Correctional Institution in Philadelphia, of 1821-36, and the New Jersey State Prison in Trenton, of 1833-36.

The Panopticon form was designed at about the same time by British law reformer and social philosopher Jeremy Bentham. A huge roundhouse structure covered by a glass roof, it had a central cupola for the guards, with cells arranged around the perimeter. Like the radial plan, it was based on the need for maximum visibility of cells from a single point. The Panopticon design represented an innovative use of new materials and construction methods, utilizing long-span iron technology. In this country, the idea did not flourish. The Stateville, Illinois, penitentiary of 1919 was the last of the few institutions to be built based on the Panopticon

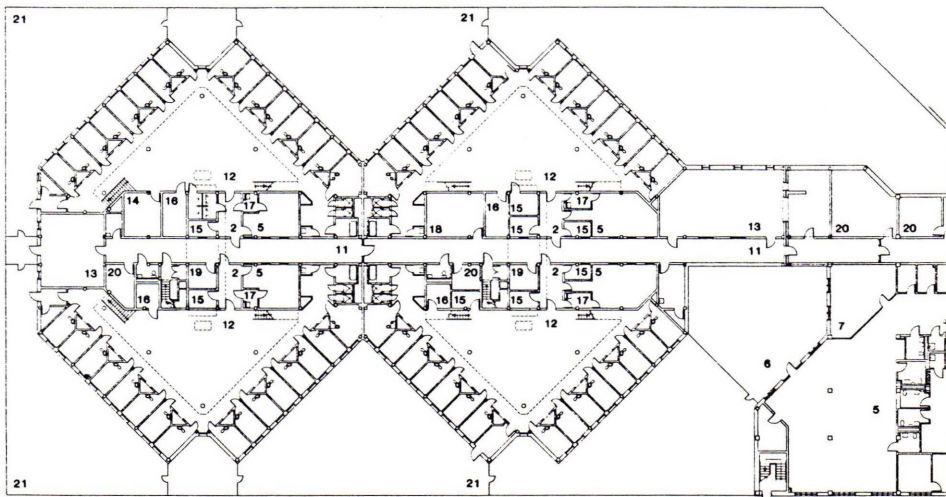
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New Jersey State Prison, Trenton, NJ, 1833-1836. Lightly drawn wings were not built.



Panopticon Cell House, Illinois State Penitentiary.



A modern "pod" plan: Ocean County Justice Complex by GRAD Associates.

Direct Supervision Management

by Anthony W. Pellicane

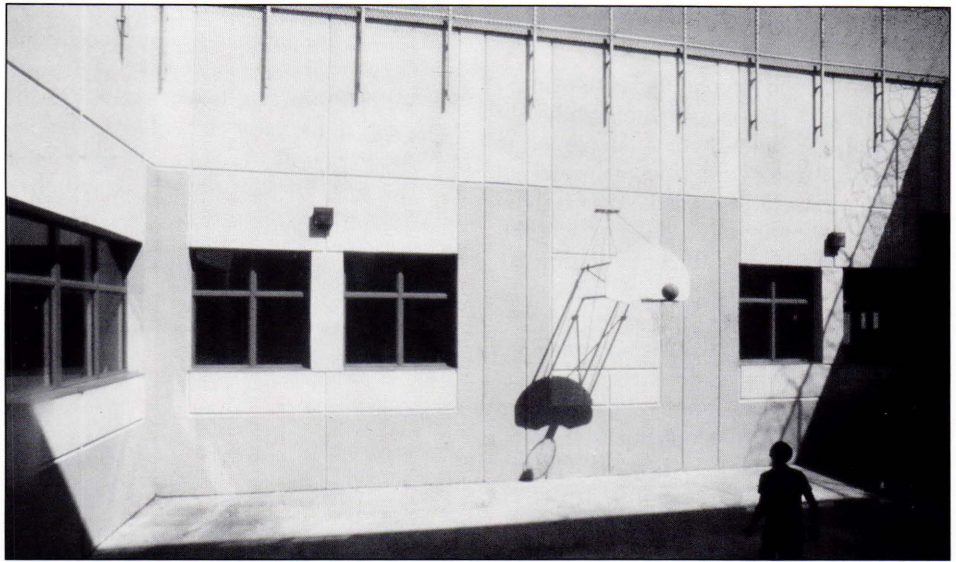
In recent decades, a new development has taken place in the history of penology, one that is considered by some to be the first major prison innovation since the late 18th century (see **Prisons through History**, facing page).

Direct Supervision Management (DSM) is both a penal and architectural approach to the burgeoning population of the nation's jails. In practical use for 15 years, Direct Supervision Management has been shown to increase effective control of inmates, increase staff efficiency, alleviate overcrowding, and reduce overall costs. The basic concept behind DSM is that through the design of the cell cluster (pod) and the management techniques of the corrections officers, inmates are dealt with in a pro-active manner, diffusing potentially violent situations, as opposed to the traditional method of reacting to crises and disturbances after they occur.

The architectural design of a direct supervision facility differs from a traditional linear-oriented jail in several areas. The direct supervision facility incorporates a humane, barrier-free design into a podular structure that contains cells for 64 or more inmates as well as recreational and dining facilities. By having these services in each pod, movement of the inmates throughout the jail is drastically reduced, thereby eliminating one of the primary causes of disturbances. The tiered podular arrangement affords the corrections officer easy surveillance of the entire structure. This line-of-sight capability, not achieved in any other jail design, allows the officer to prevent problems, effectively manage the inmates, and keep order. Due to the open design of DSM pod, costly steel bars and doors, electronic locking systems, and stainless steel fixtures are eliminated, thus reducing construction costs. "Soft", commercial grade furnishings enhance the comfort level of the pod and are less expensive than "hard", maximum-security products.

Essentially, there are three types of jails in the United States: linear indirect supervision, podular remote supervision, and podular direct supervision. Linear jails, those with long corridors of electronically locked cells, are the oldest; they afford corrections officers poor line-of-sight and require the extensive movement of inmates to and from their daily routines. Podular remote supervision

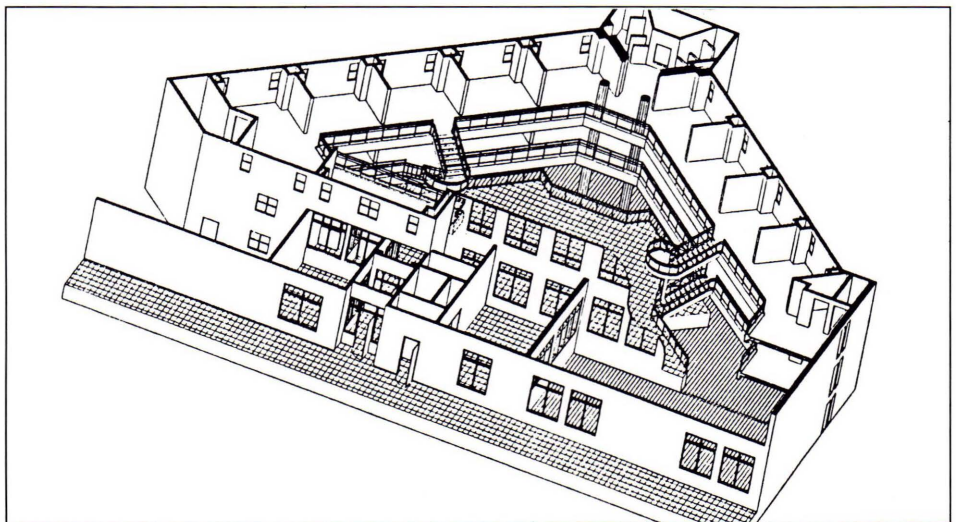
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Outdoor Recreation off Living Unit



Interior View of Living Unit, Middlesex County Adult Correctional Facility, by Rothe-Johnson Associates.



Middlesex County Adult Correctional Facility Housing Unit

Photos: ©1991 Bruce Goldsmith.

Prisons through History

Continued from p. 20

design. It was the linear form that prevailed.

Prison design later in the 19th century can be seen as the consolidation and elaboration of the same themes developed in the 18th century, and fine examples of architecture were produced. Throughout that century, nationally recognized architects vied vigorously for commissions to design prisons. Strong and handsome forms resulted, including some of this country's finest Egyptian Revival designs by noted architects such as Haviland and Strickland. Probably the most influential example of the 19th-century prison architecture in America is the Allegheny County Courthouse and Jail by H.H. Richardson.

Towards the middle of the 20th century, penal philosophy took strides forward. Rehabilitation of the offender became a key goal for reform-minded administrators, and a humane environment was sought, in which vocational and educational programs could be conducted. Isolation was avoided and social interaction encouraged. In recent years, a Prisoner's Rights movement has grown, encouraged by successful court suits. Initially a reaction to inhumane conditions, it has moved into the area of establishing standards for space, sound, light, and air for inmates. The movement has become a force for better environments in correctional institutions.

Many jurisdictions have experienced improved discipline in prisons when they provide a relatively normal, "soft," environment for the general inmate population, while retaining a small "hard" wing for unruly transgressors. Certain other design attributes remain particularly important in prisons, such as separate circulation patterns for different user groups, clear visibility to minimize opportunities for concealment, and the ability to rapidly section the facility in times of emergency.

The cost of constructing a correctional facility today is high (about \$75,000 to \$100,000 per inmate bed), and the cost of operating it is particularly expensive (\$80 per day per inmate in this area). Much thought and ingenuity have been devoted to the subject of containing both costs while providing an increasing humane environment, and the answer seems to lie in improving the system of supervising inmates, thereby reducing staff numbers

without compromising security. Two general types of supervision exist: indirect, in which staff members supervise from a separate control area out of bounds to the inmates; and a more recently developed system, direct, in which the staff members remain within the prisoner precinct to observe activities and dispel potential problems. The latter, called Direct Supervision Management, is the subject of another article in this issue (p. 21). As the most recent in a succession of penal

philosophies over the centuries, this management approach aims to incorporate the progressive and humane tendencies of our times. □

Allen Trousdale, AIA, is Principal in charge of Government and Justice Facilities at Grad Associates, PA, in Newark, and Ken Underwood, AIA, is Director of Design for Criminal Justice Facilities at Grad.

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Direct Supervision Management

Continued from p. 21

line-of-sight of the officers; however, the officers are located in a remote operating station and do not interact with the inmates. Podular direct supervision jails locate a corrections officer inside the pod along with the inmates in order to supervise and manage the inmates.

The Direct Supervision Management approach is based on several key principles: effective control, effective supervision, competent staff, safety of staff and inmates, manageable and cost effective operations, and accurate classification. In a direct supervision environment, the corrections officer must understand human behavior and be able to control any situation that may arise. With well-trained staff people, potential difficulties within the pod can be prevented.

Initial classification of inmates is extremely important prior to placing them in a direct supervision atmosphere. Implicit in the understanding of effective control is the fundamental precept that some inmates (approximately 10% to 15%) will require maximum security. It is a fundamental precondition that inmates who exhibit violent tendencies, have serious behavioral difficulties, or have emotional or psychiatric problems be housed in maximum security areas. The objective is to house as few of the population in these expensive units without compromising the principle that only compliant inmates are permitted to be housed in direct supervision housing units.

Throughout the State of New Jersey and the country, overcrowding in jails has become endemic, especially during the 1980's. Most notably, the jail population has, over the past decade, exploded with drug-related and drunk-driver inmates who are either awaiting trial or sentenced and serving their time. With a great amount of backup in the county jails, a cost-efficient, staff-efficient solution is needed. With a 64 to 1 inmate to staff ratio and the option to double bunk if necessary, a direct supervision podular design can increase the capacity of existing institutions or can be used to create new, economically viable alternative institutions. This 64 to 1 ratio is currently used in the Federal Prison System and other direct supervision facilities.

The diminished need for vandal-proof and security-type furnishings, fixtures, and finishes throughout most of the facili-

ty lowers construction costs significantly. Over the past 15 years, administrators have developed a knowledge base regarding the performance of commercial grade material in direct supervision facilities, and can select less costly alternatives to the security components without concern that future replacement costs will cancel out cost savings. The difference in cost is dramatic: building and furnishing a direct supervision facility may cost one-half as much as a traditional jail.

It is widely accepted that construction of a jail is 30% of the total cost of running the facility, while personnel garner the other 70% in expenditures. By its design, a direct supervision facility requires less personnel, due to the increased inmate-to-staff ratio and the reduction in inmate movement throughout the institution. By providing a self-contained housing block and well-trained staff in direct contact with the population, efficient use of personnel is maximized. □

Anthony W. Pellicane is Director of Justice Facilities Planning at Rothe-Johnson Associates. Previously, he served as Director of Middlesex County Department of Corrections and Youth Services.

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